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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/534,961	05/16/2005	Masahiko Kadokura	10873.1601USWO 1695		
	7590 08/20/200 U MANN, MUELLER	EXAMINER			
P.O. BOX 2902-0902 MINNEAPOLIS, MN 55402			CATTUNGAL, SANJAY		
			ART UNIT	PAPER NUMBER	
			3768		
			MAIL DATE	DELIVERY MODE	
			08/20/2009	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Applicati	on No.	Applicant(s)				
Office Action Summary			51	KADOKURA, MASAHIKO				
			•	Art Unit				
			CATTUNGAL	3768				
Period fo	The MAILING DATE of this communica or Reply	ntion appears on the	cover sheet with the o	correspondence ad	ddress			
WHI(- Exte after - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAI nisions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this community of period for reply is specified above, the maximum statuth the to reply within the set or extended period for reply will reply received by the Office later than three months after ed patent term adjustment. See 37 CFR 1.704(b).	LING DATE OF The 37 CFR 1.136(a). In no evication. ory period will apply and will, by statute, cause the app	HIS COMMUNICATION ent, however, may a reply be till ill expire SIX (6) MONTHS from dication to become ABANDONE	N. mely filed n the mailing date of this of ED (35 U.S.C. § 133).	•			
Status								
1) 又	Responsive to communication(s) filed	on <i>18 May 200</i> 9						
	This action is FINAL . 2b) ☐ This action is non-final.							
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
٠,١	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims							
4)🖂	Claim(s) 1-6 is/are pending in the appli	ication.						
/	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)□	Claim(s) is/are allowed.							
	s)⊠ Claim(s)is/are allowed. S)⊠ Claim(s) <u>1-6</u> is/are rejected.							
·								
•	Claim(s) are subject to restriction	on and/or election r	equirement.					
Applicat	ion Papers							
9)□	The specification is objected to by the E	- - - - - - -						
•			ed or b) objected to	by the Examiner.				
10)☑ The drawing(s) filed on <u>16 May 2005</u> is/are: a)☑ accepted or b)☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.05(a).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority (under 35 U.S.C. § 119							
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:								
	 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
	application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.								
Attachmen	t(s)							
1) 🔲 Notic	e of References Cited (PTO-892)		4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date Notice of Informal Patent Application								
	mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date		6) Other:	atont Application				

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DETAILED ACTION

Response to Arguments

- 1. Applicant's arguments filed 05/18/2009 have been fully considered but they are not persuasive. Applicant argues that in Taylor the first pulley is not attached to the shaft rather to the bevel gear, which is attached the shaft. Examiner agrees with the applicant that the First pulley is attached to the shaft via the bevel gear, but would like to point out that the claims state "a first pulley attached to a tip of said rotation shift" it does not state that its directly connected as such in the Taylor reference the First pulley is connected to the shaft.
- 2. Applicant argues that the Morley reference is non-analogous art as it is an invasive cauterizing and cutting tool for use with robotic surgical system. Examiner would like to point out that Morley reference was only used to teach the use cables with pulleys. Morley reference is in the biomedical art and as such is relevant and pertinent as it solves the problem of orientation of a probe using pulleys.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,709,397 to Taylor in view of U.S. Patent No. 6,840,938 to Morley et al.

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- 5. Regarding Claims 1 and 6, Taylor teaches an ultrasonic probe, comprising an inserting portion to be inserted into a body cavity (Fig. 2); and a grip portion held by an operator outside of the body cavity (Fig. 2), wherein the inserting portion includes a transducer unit for transmitting and receiving an ultrasonic wave (Fig. 8 elements 31-33), a rotation axis provided in the transducer unit, and a swing mechanism for swinging the transducer unit around the rotation axis as a center axis (Abstract and Fig. 8), and the grip portion includes a motor for driving the swing mechanism (Fig. 2 element 2 and 5), the swing mechanism includes a shaft connected to the motor (Fig. 2 element 13), a first pulley provided at an end portion of the shaft different from an end potion connected to the motor (Fig. 2 element 8), a second pulley coaxially provided at the rotation axis (Fig. 2 element 9), and a belt connecting the first pulley and the second pulley, and rotational movement of the motor is transmitted to the transducer unit via the shaft, the first pulley, the belt, and the second pulley (Abstract, Figs. 1, 2 and 8).
- 6. Taylor does not expressly teach the use of a wire to engage the pulleys.
- 7. Morley teaches the use of cables to engage the pulleys (Fig. 4b).
- 8. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Taylor with a setup to use cables to engage the pulley as taught by Morley, since the use of cables/wires/belts with pulleys is well known in the art as they are obvious variants of each other.
- 9. Regarding Claim 2, Morley teaches using pulley of the same diameter (Fig. b element 94).

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10. Regarding Claims 3 and 4, Morley teaches using pulleys to change the direction of motion (fig. 4b)

- 11. Regarding Claim 5, Morley teaches use of a third pulley to change the direction in which the wire is moved perpendicularly (Fig. 4b).
- 12. Regarding Claim 6, Morley teaches a groove on the peripheral surface of the first pulley and the second pulley (Fig. 4b element 94).

Conclusion

- 13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
- 14. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.
- 15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SANJAY CATTUNGAL whose telephone number is (571)272-1306. The examiner can normally be reached on Monday-Friday 9-5.

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16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Long Le can be reached on (571) 272-0823. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

17. Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SPC

/Long V Le/

Supervisory Patent Examiner, Art Unit 3768